

Publications

Recent Publications

Jin-Hui Hor, Eunice Shi-Yi Soh, Li Yi Tan, Valerie Jing-Wen Lim, Munirah Mohamad Santosa, Winanto, Beatrice Xuan Ho, Yong Fan, Boon-Seng Soh, Shi-Yan Ng#. Cell cycle inhibitors protect motor neurons in an organoid model of Spinal Muscular Atrophy. (Under revision).

#corresponding author

Elizabeth J. Paik*, Alison O'Neil*, Shi-Yan Ng*, Chicheng Sun, Lee L. Rubin (2018). Using intracellular markers to identify a novel set of surface markers for live cell purification from a heterogeneous hiPSC culture.

Sci Rep. 8: 804 *co-first authors

Natalia Rodriguez-Muela, Nadia K. Litterman, Erika M. Norabuena, Jesse L. Mull, Maria José Galazo, Chicheng Sun, Shi-Yan Ng, Nina R. Makhortova, Andrew White, Maureen M. Lynes, Wendy K. Chung, Lance S. Davidow, Jeffrey D. Macklis, Lee L. Rubin (2017). Single-cell analysis of SMN reveals its broader role in neuromuscular disease.

Cell Rep. 18: 1484-1498.

Constantin d'Ydewalle, Daniel Ramos, Noah J. Pyles, Shi-Yan Ng, Marius Gorz, Celeste M. Pilato, Lingling Kong, Lee L. Rubin, Frank Rigo, C. Frank Bennett, Charlotte J. Sumner (2017).

The antisense transcript SMN-AS1 regulates SMN expression and is a novel therapeutic target for Spinal Muscular Atrophy.

Neuron 93: 66-79.

Mary H. Wertz, Kellen Winden, Pierre Neveu, Shi-Yan Ng, Ebru Ercan, Mustafa Sahin (2016).

Cell type specific miR-431 dysregulation in a motor neuron model of Spinal Muscular Atrophy.

Human Mol. Genet. 25: 2168-2181.

Boon Seng Soh*, Shi-Yan Ng*, Hao Wu, Kristina Buac, Joo-Hye C. Park, Xiaojun Lian, Jiejia Xu, Kylie S. Foo, Ulrika Felldin, Xiaobing He, Massimo Nichane, Henry Yang, Bu Lei, Ronald A. Li, Bing Lim, Kenneth R. Chien (2016).

Clonal human embryonic stem cell derived bi-potent cardiovascular progenitor cells generate an in vivo coronary arterial system.

Nat. Commun. 8: 10774 *co-first authors

Samir Ounzain, Rudi Micheletti, Carme Arnan, Dario Cecchi, Isabelle Plaisance, Blanche Schroen, Michael Alexanian, Christine Gonzales, Shi-Yan Ng, Giovanni Bussoti, Iole Pezzuto, Cedric Notredame, Stephane Hetmans, Roderic Guigo, Rory Johnson, Thierry Pedrazzini (2015).

CARMEN, a human super enhancer-associated long non-coding RNA controlling cardiac specification, differentiation and homeostasis.

J Mol. Cell Cardiol. 89: 98-112.

Shi-Yan Ng, Boon Seng Soh, Natalia Rodriguez-Muela, David G. Hendrickson, Feodor Price, John L. Rinn, Lee L. Rubin (2015).

Genome-wide RNA-seq of human motor neurons implicates selective ER stress activation in Spinal Muscular Atrophy.

Cell Stem Cell 17: 569-84.

Boon Seng Soh, Kristina Buac, Huansheng Xu, Edward Li, Shi-Yan Ng, Hao Wu, Jolanta Chmielowiec, Xin Jiang, Lei Bu, Ronald Li, Chad Cowan, Kenneth R. Chien (2014).

N-cadherin prevents the premature differentiation of second heart field progenitors in the pharyngeal mesoderm microenvironment.

Cell Res. 24: 1420-32.

Shi-Yan Ng, Gireesh K. Bogu, Boon Seng Soh, Lawrence W. Stanton (2013).

The long non-coding RNA RMST interacts with SOX2 to regulate neurogenesis.

Mol. Cell 51: 349-59.

Shi-Yan Ng, Lin Lin, Boon Seng Soh, Lawrence W. Stanton (2013).

Long non-coding RNAs in development and disease of the central nervous system.

Trends in Genetics 29:461-8.

Shi-Yan Ng, Lawrence W Stanton (2013).

Long non-coding RNAs in stem cell pluripotency.

Wiley Interdiscip.Rev RNA 4: 121-8.

Boon Seng Soh, Dahai Zheng, Julie Su Li Yeo, Henry He Yang, Shi-Yan Ng, Lan Hiong Wong, Wencai Zhang, Pin Li, Massimo Nichane, Atasha Asmat et al. (2012).

CD166(pos) subpopulation from differentiated human ES and iPS cells support repair of acute lung injury.

Mol. Ther. 20: 2335-46.

Shi-Yan Ng, Rory Johnson, Lawrence W. Stanton (2012).

Human long non-coding RNAs promote pluripotency and neuronal differentiation by association with chromatin modifiers and transcription factors.

EMBO J. 31: 522-533.

Xu Jiang, Hao Qing Cao, Li Ya Shi, Shi-Yan Ng, Lawrence W. Stanton, Sing Yian Chew (2012).

Nanofiber topography and sustained biochemical signaling enhance human mesenchymal stem cell neural commitment.

Acta Biomater. 8: 1290-1302.

BOOK CHAPTERS

Shi-Yan Ng and Lee L. Rubin (2016).

Cell Culture Models of Spinal Muscular Atrophy. In C. J. Sumner, S. Paushkin, and C.-P. Ko (Eds),

Spinal Muscular Atrophy: Disease Mechanisms and Therapy